

Work Order ID 135357***135357***

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Wednesday, August 12, 2015 4:25:07 PM

Item ID: D4711-043

Accept

N900040100Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Expandable Pin Assembly

Start Date: 8/12/15 Start Qty: 6.00

6

Cust Item ID:

Required Date: 8/12/15 Req'd Qty: 6.00

6

Customer:

Reference:

Approvals: Process Plan: WLS Date: AUG 13 2015

Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4711	C								

100

0.00

100

Purchasing

Memo

0.00

Purchasing

Issue P/O: 29471
Possible supplier: Mc Master Carr
Supplier P/N: 97787A661
Material release note is requiredCY AUG 14 2015 6

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

0.00

Packaging

6x 80 15-08-17

120

QC6- Inspect dimensions to drawing

0.00

120

QC

Memo

0.00

Quality Control

6DAS
38
9-89

AUG 17 2015

DQA:

Date: 15/08/02



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed

Date: 15/09/01

Work Order update only

Work Order: 135357		DISPOSITION		AGAINST DEPARTMENT/PROCESS					
Part No. D4711-043		Rework ☐		Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☒		
NCR No. 15-5289		Scrap ☐		Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐		
		Use-as-is ☒		Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐		
		Suspected Unapproved ☐		Large Fab ☐	Composite ☐	Supplier ☐			
Date: 150824		Step #: 120		QTY Effective: 6			MRB (QSI042) Approval A.P.		
Description Work Order Deviation				Disposition			15.08.17		
McMaster - Carr part <u>NO longer available</u> , see PARIS-439 for details.				ACCEPTABLE TO USE PN 09094-6A DPC 4/6 MATERIAL OF SPLIT RINGS, CORE PIN & BARREL NOW 17-4 PH H900 CONDITION WAS H925. NEW PART IS STRONGER.			Completed By 38 9-89		
R.C. part discontinued discontinued				TEST FIT BY DS PROVED NO EFFECT ON FIT OR FUNCTION			Lead hand Supervisor Approval Verification 17 2015		
							DAS 9 150824		
							QC/ QA Coordinator Approval		
							DAS 9 150824		
Root Cause				FAULT CATEGORY					
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☒	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐								
Misidentified ☐	Past Due ☐	OTHER: part no longer available							

Work Order ID 135357

135357

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Wednesday, August 12, 2015 4:25:07 PM

Item ID: D4711-043 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Expandable Pin Assembly
 Start Date: 8/12/15 Start Qty: 6.00 ***6*** Cust Item ID:
 Required Date: 8/12/15 Req'd Qty: 6.00 ***6*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>ST124</u>	0.00							
130									
Packaging	Memo	0.00							
Packaging									
				DAS 26 9-89					
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.00							
Quality Control									

6 JA AUG 17 2015

ML5 AUG 18 2015

ML5 AUG 18 2015

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date :	Step #:	QTY Effective :			MRB (QS1042) Approval	
Description Work Order Deviation		Disposition			Completed By	
					Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY				
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐	
OTHER : _____						

Picklist Print

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Page 1

Work Order ID: 135357

135357

Parent Item: D4711-043

D4711-043

Parent Item Name: Expandable Pin Assembly

Start Date: 8/12/15

Required Date: 8/12/15

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP REV:B 12.10.16 AS PER DWG REV.A DD VERF:JFS

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
97787A661		Purchased	No			110	Each	0.0000	1	6			
97787A661									**				
Expandable Pin													

6X8015-08-17

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

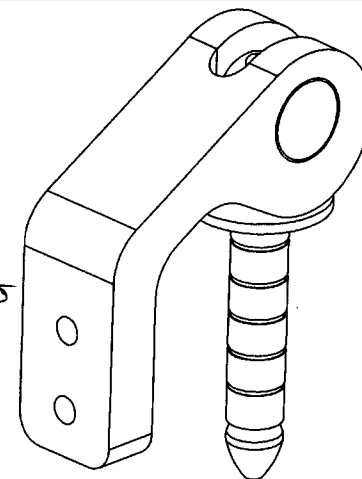
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐							
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation				Disposition				Completed By			
								Lead hand / Supervisor Approval Verification			
								QC / QA Coordinator Approval			
Root Cause		FAULT CATEGORY									
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____									
Misidentified ☐	Past Due ☐										

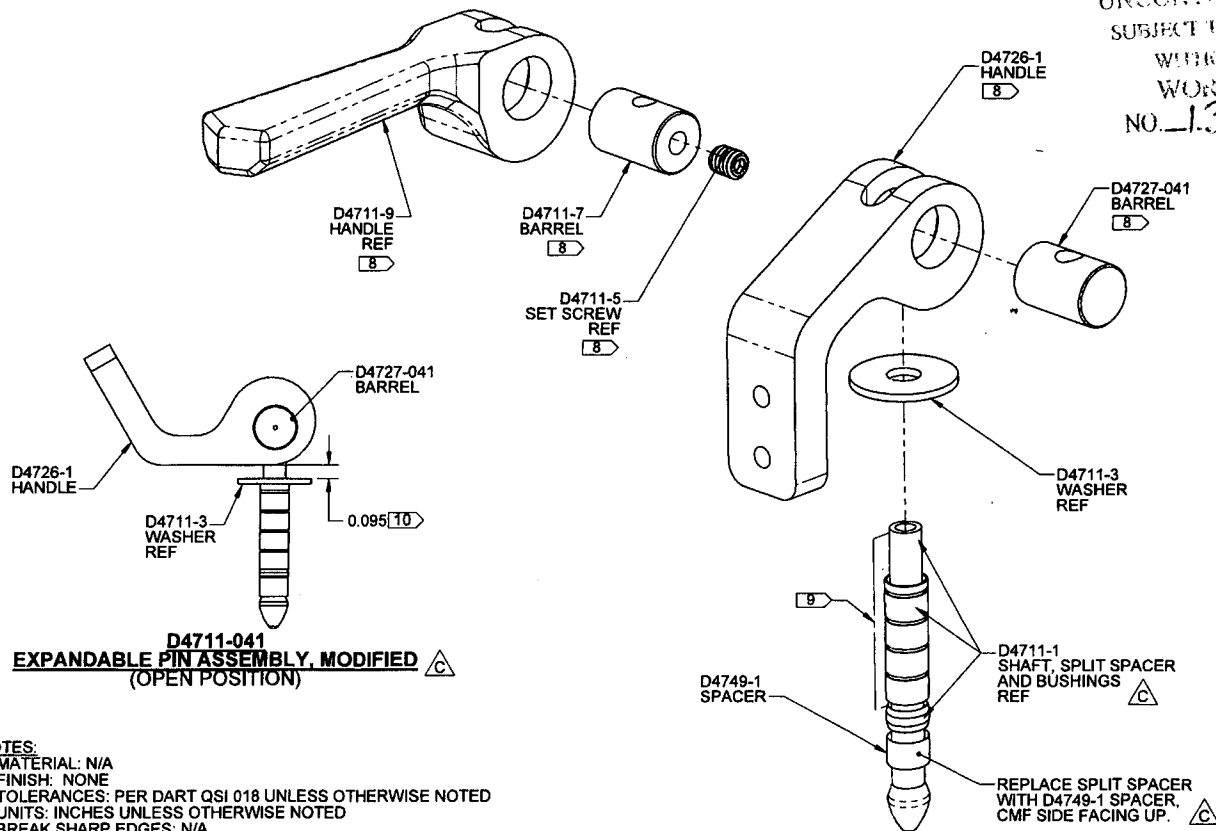
ITEM	QTY -041	P/N	DESCRIPTION
	X	D4711-041	EXPANDABLE PIN ASSY, MODIFIED
1	1	D4711-043	EXPANDABLE PIN ASSY
2	1	D4726-1	HANDLE
3	1	D4727-041	BARREL
4	1	D4749-1	SPACER

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO ALL MODS
WITHOUT THE
WORK ORDER
NO. 135357/ML5
1508-13



**D4711-041
EXPANDABLE PIN ASSEMBLY, MODIFIED
(CLOSED POSITION)**

RELEASED
2013-03-11



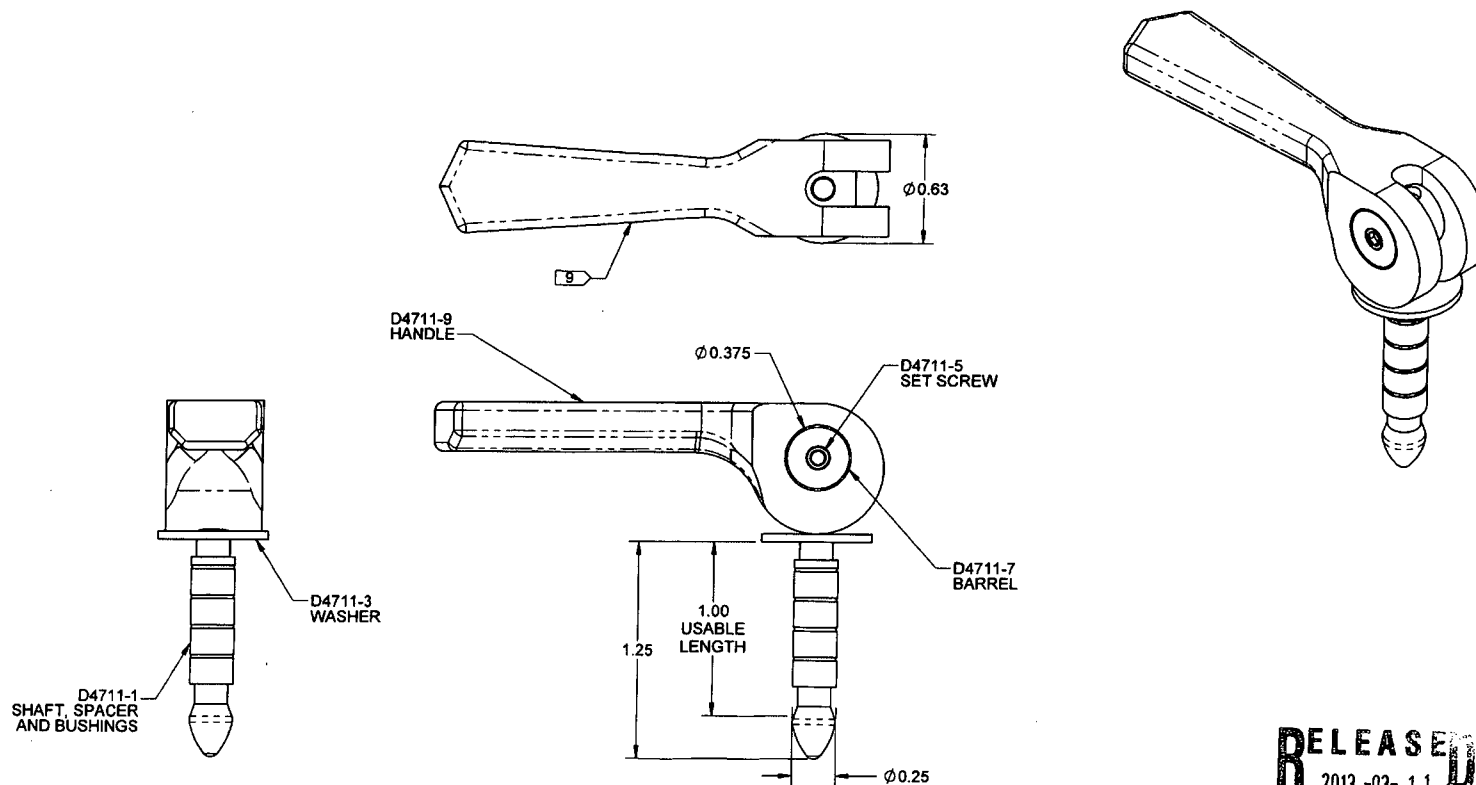
**D4711-041
EXPANDABLE PIN ASSEMBLY, MODIFIED
(OPEN POSITION)**

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4711-041" AND B/N "BXXXXX" PER QSI 044 6.7
- 7) WEIGHT: 0.19 lbs
- 8) REPLACE D4711-9 HANDLE WITH DART D4726-1 HANDLE.
REPLACE D4711-7 BARREL WITH DART D4727-041 BARREL.
REPLACE BOTTOM SPLIT SPACER WITH D4749-1 SPACER.
DISCARD D4711-5 SET SCREW, D4711-7 BARREL, D4711-9 HANDLE, BOTTOM SPLIT SPACER.
- 9) WHEN INSTALLING D4749-1 SPACER, ENSURE THAT ALL RETAINED SPLIT SPACERS AND BUSHINGS REMAIN IN THEIR ORIGINAL SEQUENCE AND ORIENTATION.
- 10) INSTALL THE D4711-1 SHAFT WITH THE ASSEMBLY IN THE OPEN POSITION, UNTIL A GAP OF 0.095" EXISTS BETWEEN THE D4711-3 WASHER AND THE D4726-1 HANDLE. DO NOT OVERTIGHTEN THE SHAFT INTO THE D4727-041 BARREL.

C	REVISED NOTE (A4-1) & NOTE 8, ADDED NOTE 10. PICTORIAL UPDATE, ADDED VIEW B8-1.	AP	13.02.12
B	ADDED D4749-1 SPACER, MODIFIED NOTES 8 AND 9	AP	12.11.23
A	NEW ISSUE	RP	12.08.19
REV.	DESCRIPTION	BY	DATE
DESIGN	RP	DART AEROSPACE USA, INC.	
DRAWN	AP	KENT, WA	
CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.	91	D4711	SHEET 1 OF 2
APPROVED	140	TITLE	SCALE
DE APPR.	14	ADJUSTABLE DIAMETER PIN	NTS
DATE	13.02.12	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIES OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	

SPECIFICATION CONTROL DRAWING



D4711-043 EXPANDABLE PIN ASSY

NOTES:

- 1) MATERIAL: CORE PIN, SPLIT RINGS & BARREL: STAINLESS STEEL 17-4 PH CONDITION H925 PER AMS 5643
- 2) FINISH: N/A
- 3) TOLERANCES: N/A
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.14 lbs
- 8) RECOMMENDED SUPPLIER: MCMASTER CARR P/N 97787A661
- 9) HANDLE, BARREL AND SET SCREW TO BE DISCARDED AT NEXT HIGHER ASSEMBLY

RELEASE
2013-03-11

DESIGN	RP	DART AEROSPACE USA, INC.	
DRAWN	AP	KENT, WA	
CHECKED	AS	DRAWING NO.	REV. C
MFG. APPR.	21	D4711	SHEET 2 OF 2
APPROVED	21	TITLE	SCALE
DE APPR.	21	ADJUSTABLE DIAMETER PIN	
DATE	13.02.12	COPYRIGHT © 2012 BY DART AEROSPACE USA, INC.	
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Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO29471**

Purchase Order Date 8/14/2015

PO Print Date 8/14/2015

Page Number 1 of 2

Order From :

VU-MCM001

Ship To : DART AEROSPACE LTD

MCMASTER-CARR SUPPLY CO,
P.O. BOX 7690
CHICAGO, IL 60680-7690
US

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA

Contact Name

Vendor Phone 330 995 5500

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Ship To Contact

Terms

Net 10

Ship To Phone

Currency

USD

Ship Via:

FedEx Overnight collect

FOB

FCA - (Free Carrier)

Ship Acct:

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	6264k85 AS PER DWG D5039 REV. B2 B135676	Chain	8/17/2015 Yes 8/17/2015		10.00 Each	\$18.73	\$187.30
Line Total:							\$187.30
2	97787A661 AS PER DWG D4711 REV. C B135357	Expandable Pin	8/17/2015 Yes 8/17/2015		6.00 Each	\$114.68	\$688.08
Line Total:							\$688.08
3	71400-90	4061T23 O-RING	8/17/2015 Yes 8/17/2015		1.00 Each	\$8.07	\$8.07

SP15-08-M

PO Instructions: PROCUREMENT QUALITY CLAUSES
A000 CLAUSES NOT REQUIRED

Note:

8/14/2015

200 Aurora Industrial Pkwy
Aurora OH 44202-8087
330-995-5500
cle.sales@mcmaster.com

Dart Aerospace Ltd
1270 Aberdeen St
Hawkesbury ON K6A 1K7
Canada

Purchase Order
PO29471

Order Placed By
Chantal Lavoie

McMaster-Carr Number
7361958-01

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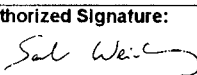
08/14/2015

Line	Product	Ordered	Shipped
1	6264K85 Highly Corrosion-Resistant Roller Chain, 304 Stainless Steel, ANSI #40-Stainless Steel, 1/2" Pitch, 10' LG	1 Each	1
2	97787A661 Expanding Diameter Quick-Release Pin, 1/4" Diameter, 1" Usable Length	6 Each	6
3	4061T23 Square-Profile O-Ring, Oil-Resistant Buna-N, Dash Number 208, Packs of 50 Your Part Number: 71400-90	1 Pack	1
4	94125K811 Metric Compression Spring, Music Wire, 20MM Overall, 11.25MM OD, 1.25MM Wire, Packs of 5 Your Part Number: 71400-30	1 Pack	1

SP15-08-17

McMaster-Carr Supply Company 200 Aurora Industrial Pkwy Aurora, OH 44202-8087 USA Phone: 330-995-5500 Fax: 330-995-9600 E-Mail: cl.sales@mcmaster.com Employer Identification Number (EIN): 36-1458720		Invoice: 36784635 Purchase Order: PO29471 Release: McMaster-Carr Number: 7361958-01		ORIGINAL COMMERCIAL INVOICE CERTIFICATE OF ORIGIN	
Ultimate Destination: Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada		Shipped: 14-Aug-2015 Shipper's Export Declaration (SED): NO EEI 30.36		FOB: ORIGIN	
Intermediate Consignee:		Bill To: Dart Aerospace Ltd 1270 Aberdeen St Hawkesbury ON K6A 1K7 Canada		Tax Number:	
Forwarding Agent:		Billing Attention: Shipping Attention: Contact:			

Line	Description	Qty & Unit	Unit Price	Extension
1	6264K85 Highly Corrosion-Resistant Roller Chain, 304 Stainless Steel, ANSI #40-Stainless Steel, 1/2" Pitch, 10' LG Country of Origin: Japan Schedule B #: 731511 ECCN #: EAR99 NLR	1 EA	\$187.30	\$187.30 ✓
2	97787A661 Expanding Diameter Quick-Release Pin, 1/4" Diameter, 1" Usable Length Country of Origin: United States Schedule B #: 731829 ECCN #: 9A991 NLR	6 EA	\$114.68	\$688.08 ✓
3	4061T23 Square-Profile O-Ring, Oil-Resistant Buna-N, Dash Number 208, Packs of 50 71400-90 Country of Origin: Peoples Republic of China Schedule B #: 401693 ECCN #: EAR99 NLR	1 PK	\$8.07	\$8.07 ✓
4	94125K811 Metric Compression Spring, Music Wire, 20MM Overall, 11.25MM OD, 1.25MM Wire, Packs of 5 71400-30 Country of Origin: United States Schedule B #: 732020 ECCN #: EAR99 NLR	1 PK	\$12.33	\$12.33
	NOTE Tracking number(s) for this shipment: 647899829952			
	Your order is subject only to our terms and conditions, available at www.mcmaster.com or from our Sales Department.			
	These commodities, technology, or software were exported from the United States in accordance with Export Administration regulations. Diversion contrary to US law is prohibited.			

Shipping Weight (In kgs): 3		Number of Packages: 1		Invoice Amounts:		Merchandise Amount: \$895.78 Total (In USD): \$895.78	
Package Dimensions: 36 X 21 X 11 CM = .008 CUBIC M				Payment Terms: 2% discount on merchandise only if paid within 10 days, net 30 days			
Authorized Signature: 		Date: 14-Aug-2015		Remit payment to: (by mail) McMaster-Carr Supply Company PO Box 7690 Chicago, IL 60680-7690 USA		(by wire transfer) Bank of America Illinois 231 S LaSalle Chicago, IL 60697 ABA 071000039 Account 86666-02021 SWIFT BOFAUS3N	
Name: Sarah Weinberg		Title: Operations Mgr.		Page 1 of 1			